Table 1: Solutions to Prevent Electrocutions

| Source | Hazard | Solution |
|------------------------------|--|---|
| Power line- direct contact | Contact with live wire | • Use insulating blankets, cover-up equipment, live-line tools and insulating line hose ¹ |
| | | • Use Building Information Modeling (BIM) for safety planning ¹ |
| | | • Wear personal fall arrest system (PFAS) in case of shocks while working at heights ² |
| | | • Don't use flexible wiring where it may get damaged ³ |
| | Contact with voltage while working on de-energized power lines | • Verify appropriate transfer switch is installed and in use prior to commencing work ¹ |
| | | • Test whether circuits are de-energized, then ground circuits, before starting work ³ |
| | | • Use temporary protective grounds ¹ |
| | | • Use lock out tag out (LOTO) devices ¹ |
| | Contact with underground electric cable | • Use geospatial augmented reality system to locate underground cables ¹ |
| Power line- indirect contact | Live power line touches ladder in use | Use non-conductive ladders ¹ |
| | Live power line touches construction equipment in use | • Use overhead powerline proximity warning devices for heavy equipment ¹ |
| | | • Keep equipment a safe distance from uninsulated overhead power lines and service entrance cables ² |
| Lightning | Working outside during a storm | Ring ground¹ Go inside out of the rain until safe to return to work³ |
| Electric devices | Voltage spike or transfer from electrical device in use | • Use surge protection devices (SPD) ¹ such as circuit breakers, fuses, ground fault circuit interrupters (GFCIs), and arc-fault circuit interrupters ⁴ |
| | | • Regularly inspect and maintain tools ⁴ |
| | | • Take frayed wires and other damaged electrical parts out of service immediately ⁵ |
| | | • Only use correct size and type of wire ³ |
| | Contact with energized conductors | • Use proper cover-up equipment installed by trained worker ¹ |
| | Use of electrified devices in wet conditions | • Use ground fault circuit interrupters (GFCIs) ¹ |
| | | • Avoid working in wet conditions, wearing wet clothes, or standing in water ³ |